

# Testbed Roundup:

# Joint Hurricane Testbed

---

Shirley Murillo - NOAA/AOML

Chris Landsea - NOAA/NHC

Jiann-Gwo Jiing - NOAA/NHC

Joint Hurricane Testbed is funded by the US Weather Research Program in NOAA/OAR's Office of Weather and Air Quality.

# Joint Hurricane Testbed (JHT) *since 2001*

- Bridge hurricane research and operations
- Began in 2001 under the USWRP
- **Our Mission:** successfully transfer new technology, research results & observational advances from research groups to operational centers
- Testing is done at NHC or EMC

## JHT: The Process

- Call for Proposals - drafted and disseminated (bi-annually)
- Principal Investigators apply for funding through NOAA
- 7 member Steering Committee rates all proposals
- Funded projects are tested during 1 or 2 hurricane seasons in conjunction with NHC/EMC points of contact
- At the project's end, each are evaluated by NHC/EMC staff
- Implementation of successful projects are then carried out by NHC/EMC staff/PIs

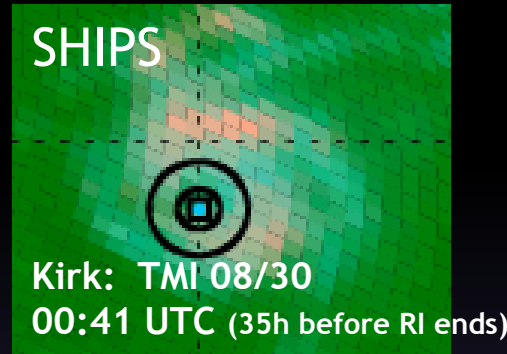
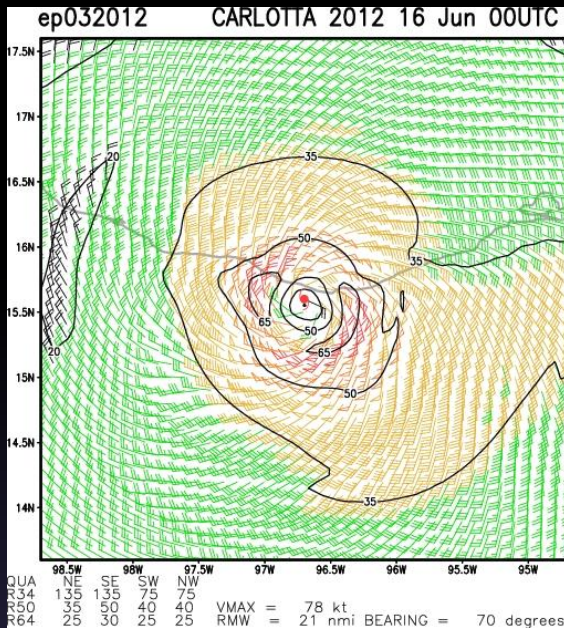
# JHT: The statistics

- Number of projects supported: 74
  - 62 completed
    - 39.5 accepted for operational implementation
    - 6 projects completed but rejected
    - 9.5 projects completed but pending further investigation (decisions deferred)
  - 12 projects started in fall 2011
- Implementation
  - 35.5 projects implemented: (including 4 5th round projects)
    - 10 numerical modeling related projects implemented by EMC/NCO:
  - 24.5 projects implemented by NHC:
  - 4 projects accepted but not yet fully implemented by NHC:

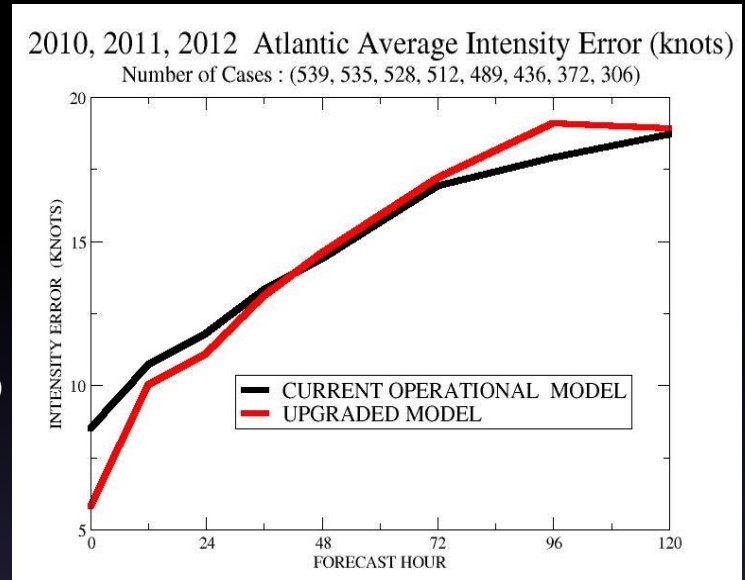
# 2012-2013 Major JHT Activities - 6th round

Primary Area of Focus	# of Projects
Improvements to dynamical models (for track, intensity, and precipitation forecasts)	3
Statistical intensity forecast guidance	4
Enhancements to observed data, assimilation	4
Tropical cyclone structure/wind/wave distribution	1
<b>Total</b>	<b>12</b>

# Project Highlights - 6<sup>th</sup> round

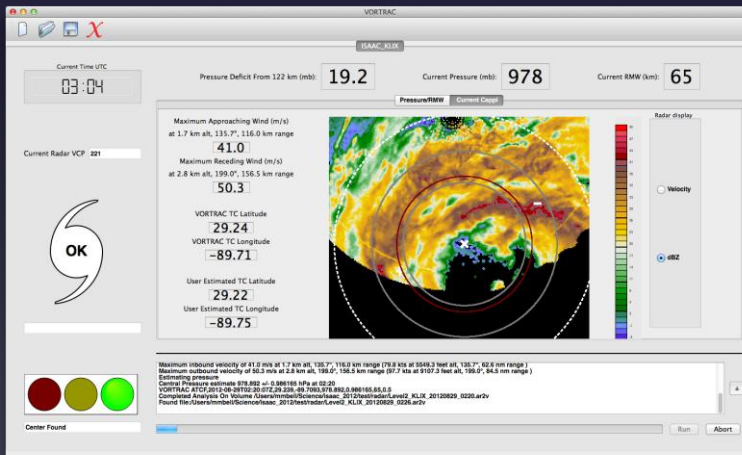


37GHz Micro Ring Pattern  
: Jiang



Auto Sfc wind: Knaff

GFDL/GFDN improvements: Bender



VORTRAC WSR88-D: Lee

# 2012-2013 Major JHT Activities - 6th round

- **March – August 2012**

- Testing of 6<sup>th</sup> round (2011-2013) projects during the season
- One project completed (1 yr project)
- Year 1/Renewal Proposals submitted and reviewed
- Eleven projects funded for 2nd year

- **March 2013**

- PIs present year 2 progress at IHC
- Submit mid-yr progress reports

- **June - August 2013**

- Final season to test of projects

# 2012-2013 Major JHT Activities - 7<sup>th</sup> round

- **August 2012**
  - Announcement of Opportunity released (\$1M)
    - Included an updated list of operational priorities
- **October 2012**
  - 36 Letters of Intent reviewed
- **December 2012 - January 2013**
  - 22 Full proposals are being reviewed
- **February - April 2013**
  - Rank and select proposals for funding
  - Work with OWAQ to fund selected projects
  - Find Point of contacts among NHC forecasters and support staff
  - Work with PIs to setup timelines for their projects
- **June – November 2013**
  - Begin real-time testing during hurricane season

# JHT Web site: for additional info

www.nhc.noaa.gov/jht

National Weather Service  
National Hurricane Center

Home News Organization Search  NWS All NOAA Go

Local forecast by "City, St" or "ZIP"  Go

Alternate Formats  
Text | Mobile  
Email | RSS  
About Alternates

Cyclone Forecasts  
Latest Advisory  
Past Advisories  
AudioPodcasts  
About Advisories

Marine Forecasts  
Atlantic & E Pacific  
Gridded Marine  
About Marine

Tools & Data  
Satellite | Radar  
Analysis Tools  
Aircraft Recon  
GIS Datasets  
Data Archive

Development  
Experimental  
Research  
Forecast Accuracy

Outreach & Education  
Prepare  
Resources  
Storm Surge  
About Cyclones  
Cyclone Names  
Wind Scale  
Most Extreme  
Forecast Models  
Breakpoints  
Glossary | Acronyms  
Frequent Questions

Our Organization  
About NHC  
Mission | Staff  
Visitors | Virtual Tour  
Library Branch  
NCEP | Newsletter

Contact Us  
Comments

Find us on  
Facebook  
twitter

USWRP  
Joint Hurricane Testbed

JHT Overview

[Overview](#) | [Current Projects](#) | [Past Projects](#)  
[Admin Presentations](#) | [Highlights](#) | [Staff](#) | [Committee](#)

Mission Statement

The mission of the Joint Hurricane Testbed is to transfer more rapidly and smoothly new technology, research results, and observational advances of the [United States Weather Research Program \(USWRP\)](#), its sponsoring agencies, the academic community and other groups into improved tropical cyclone analysis and prediction at operational centers.

News

20 March 2012: [2012 IHC presentations posted for 2011-2013 projects](#)

1 November 2011: [Press Release on new 2011 funded JHT projects](#)

30 September 2011: [New JHT projects \(Round 6, FY11-13\) announced](#)

[View News Archive](#)

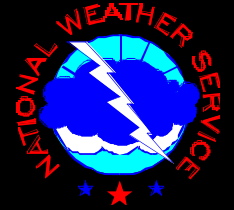
Main Activities

- Identify new techniques, models, observing systems, etc. with potential for improving forecast guidance, via an announcement of opportunity and a proposal, review, and funding process.
- Establish and maintain an infrastructure to facilitate the modification and transfer of research applications into the operational computing, communication, and display environment.
- Complete tests in a quasi-operational environment of tools, techniques, etc. provided by funded researchers, with metrics for scientific performance, ease-of-use, and time constraints.
- Prepare documentation, training, and performance evaluations of successfully transferred products to facilitate use and support in operations.

Please see the [Joint Hurricane Testbed Terms of Reference](#) (PDF) for more background information.

National Weather Service - Since 1870

Thank you



# An Update of the Joint Hurricane Testbed

---

Jiann-Gwo Jiing - NOAA/NHC

Chris Landsea - NOAA/NHC

Shirley Murillo - NOAA/AOML

Joint Hurricane Testbed is funded by the US Weather Research Program in  
NOAA/OAR's Office of Weather and Air Quality.